Measuring Member Risk and Acuity

In the APS Healthcare CareConnection system (commonly referred to as "C3"), There are three "scoring" systems used to measure and rank the healthcare risk and acuity of Vermont Medicaid members. Each member identified in the C3 system is assigned an Acuity Level, Total Risk Score (TRS), and a Percolator Score.

<u>Acuity Level:</u>
Acuity level determines the frequency of staff contact with members, the type of staff that will work with the members and the type of outreach – phone or field.

The Acuity level measure is derived from an extensive data set in order to provide a broad measure of member acuity for staff. The system automatically assigns either level 3 or level 4 acuity to high risk/ high cost Vermont Medicaid members. Since the acuity level is derived from both historical claims data as well as predictive algorithms, it is a relatively stable value (it doesn't change frequently). In Vermont, ALL members in acuities 3 and 4 are high risk/high cost. Acuity 4 is the highest risk 30% of the overall high risk/ high cost population.

Acuity level is assigned to a member using the following:
- 7,300 Medicaid members are identified as the high risk/high cost population.
- Acuity 4 is assigned to the highest risk 30% (approximately) of the population
- Acuity 3 is assigned to the lower risk 70% (approximately)
- Acuity is assigned and members stratified using these factors:
- Main contributing factors
  - CDPS score
  - PMPM
  - Count of number of chronic conditions
  - ER visits and IP admissions in the past year
- Secondary contributing factors
  - Number of providers
  - IP admission predictive model

<u>CDPS Score (listed in the TRS field):</u>
CDPS is populated in a field in C3 named The Total Risk Score (TRS). CDPS stands for Chronic Disability and Payment System (CDPS).
- CDPS is an industry standard tool developed for Medicaid populations.
  - CDPS is a public-domain, CMS-approved risk-adjustment methodology for Medicaid payment, QA, etc.
  - CDPS utilizes diagnosis and/or pharmacy data (from claims), age, sex, Medicaid category (TANF/ABD) from patient membership files
  - CDPS generates categorical disease classifications useful for identification, and risk score ranking useful for stratification

The higher the CDPS, the greater the member's health risk. In the member dashboard in C3, there is a rating of "high, medium or low" next to the TRS field. The top 10% of CDPS are shown as "high", the next 40% are shown as "medium" and the bottom 50% are shown as "low". This is distinct from the acuity score. The CDPS is used as part of the criteria in Percolator Triggers.

Percolator Score:

Percolator (Perc) score determines the outreach order for the day for each staff member, with members who have most urgent and impactable issue being ranked at the top of the outreach queue. The Percolator Score is the cumulative value of open Percolator Triggers (Perc Triggers) in the C3 system. Each individual Perc Trigger is assigned a different Percolator Trigger weight value (score).

The total Perc score as seen in the member dashboard is the sum of all the member's open triggers and then each member is ranked against the population to come up with a score based on a scale of 0 to 100.0. The Percolator Score will vary widely each day, as new triggers are opened in the system and other triggers are completed by staff.

The Perc ranking list is driven by
- o Combination of factors contributing to the acuity level
- o Recent readmissions
- o ACS admission
- o Preventable ER admissions
- o Recent IP, ER
- o Polypharmacy
- o Workflow contractual triggers
- o All other HEDIS and clinical triggers
- o Lack of ambulatory care

In Summary:
- Acuity Score is the relative ranking of high risk/high cost members using a number of factors (CDPS/PMPM/count of chronic conditions/ER/IP/# of providers etc.). This displays a broad measure of acuity in two groups (Levels 3 or 4).
- CDPS score (in the TRS field) and the relative rating of "low, medium or high" provides a detailed perspective of a members' risk level.
- Percolator score is the cumulative total value of open Perc triggers. This score is used to understand the severity of one member's Percolator triggers compared to another member. The score ensures that a staff member is always working with most important member at the correct time while managing their workload efficiently.